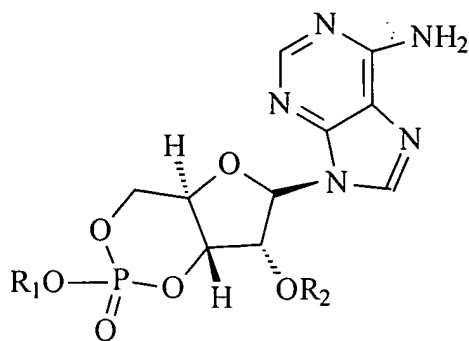


1. A method of cosmetically treating skin by mediating cell to cell communication in the skin, the method comprises topically applying to the skin a composition having a cosmetically acceptable carrier and a cell signaling compound in an amount effective to induce and promote the biosynthesis and/or bioactivity of endogenous chemicals, wherein said cell signaling compound is selected from the group consisting of:

The chemical structure shows a steroid nucleus consisting of four fused rings: three six-membered rings and one five-membered ring. The five-membered ring at the top is substituted with a carbonyl group (=O) and an R_1O group. A side chain, represented by a double bond and a CH_2 group, connects the five-membered ring to the first six-membered ring. The first six-membered ring has a double bond and a methyl group. The second six-membered ring has a methyl group. The third six-membered ring has an OR_2 group. The five-membered ring at the bottom has two methyl groups and an OR_3 group.

(b) adenosine 3',5'- monophosphate and its derivatives of the formula:



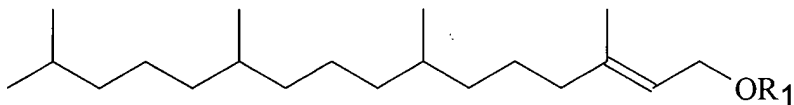
where R_1 and R_2 can independently represent hydrogen, acyl, phenyl, mono- or polyphosphate, mono- or polysulfate, glycosyl, cyclic or acyclic alkyl, alkenyl or alkynyl, wherein said phosphate or sulfate derivatives may be in the form of free acids or as salts with counter-cations selected from the group consisting of lithium, sodium, potassium, ammonium, magnesium, strontium and barium;

(c) hydrolyzed milk protein;

(d) sunflower seed extract;

(e) plankton extract;

(f) phytol, and its derivatives of the formula:



where R_1 can represent hydrogen, acyl, phenyl, mono- or polyphosphate, mono- or polysulfate, glycosyl, alkyl, alkenyl or alkynyl, wherein said phosphate or sulfate derivatives may be in the form of free acids or as salts with counter-cations selected from the group consisting of lithium, sodium, potassium, ammonium, magnesium, strontium and barium; and

(g) any mixture thereof.

2. The method of claim 1, wherein the composition is an oil-in-water emulsion.

5

3. The method of claim 1, wherein said cell signaling compound is at least two of said group of cell signaling compounds.

4. The method of claim 3, wherein said cell signaling compound is a mixture of sunflower seed extract and hydrolyzed milk protein.

10

5. The method of claim 1, wherein said cell signaling compound comprises phytol or a derivative thereof.

15

6. The method of claim 1, wherein said cell signaling compound is at least three of said group of cell signaling compounds.

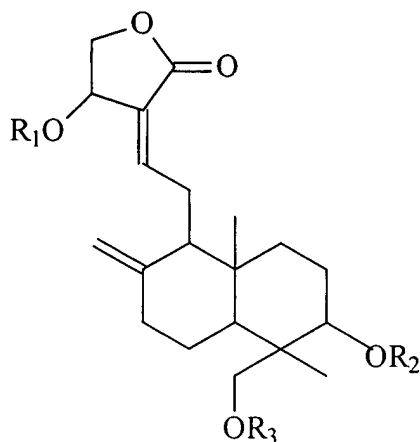
7. The method of claim 6, wherein said cell signaling compound is a mixture of sunflower seed extract, hydrolyzed milk protein, and andrographolide and/or its derivatives.

20

8. A method of treating skin to produce anti-aging and/or skin normalizing benefit comprising topically applying to the skin a composition having a cosmetically acceptable carrier and at least two compounds selected from the group consisting of:

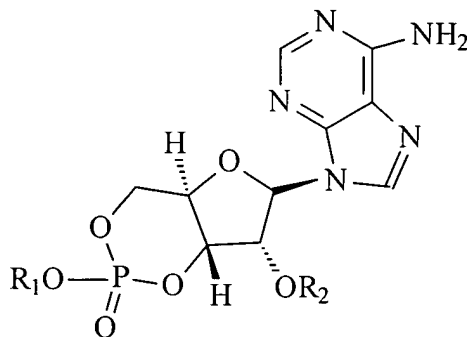
25

(a) andrographolide and its derivatives of the formula:



where R_1 , R_2 and R_3 can independently represent hydrogen, acyl, phenyl, mono- or polyphosphate, mono- or polysulfate, glycosyl, cyclic or acyclic alkyl, alkenyl or alkynyl, wherein said phosphate or sulfate derivatives may be in the form of free acids or as salts with counter-cations selected from the group consisting of lithium, sodium, potassium, ammonium, magnesium, strontium and barium;

(b) adenosine 3',5'- monophosphate and its derivatives of the formula:



where R_1 and R_2 can independently represent hydrogen, acyl, phenyl, mono- or polyphosphate, mono- or polysulfate, glycosyl, cyclic or acyclic alkyl, alkenyl or alkynyl, wherein said phosphate or sulfate derivatives may be in the form of free acids or as salts with counter-cations selected from the group consisting of lithium, sodium, potassium, ammonium, magnesium, strontium and barium;

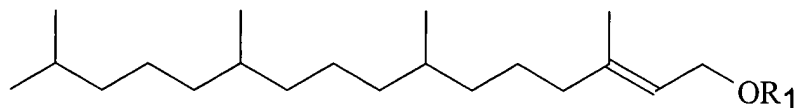
(c) hydrolyzed milk protein;

(d) sunflower seed extract;

(e) plankton extract;

5

(f) phytol, and its derivatives of the formula:



10 where R_1 can represent hydrogen, acyl, phenyl, mono- or polyphosphate, mono- or polysulfate, glycosyl, alkyl, alkenyl or alkynyl, wherein said phosphate or sulfate derivatives may be in the form of free acids or as salts with counter-cations selected from the group consisting of lithium, sodium, potassium, ammonium, magnesium, strontium and barium; and

15 (g) any mixture thereof.

9. The method of claim 8, wherein the combination of the at least two compounds is present in an amount effective to induce and promote the biosynthesis and/or bioactivity of endogenous chemicals that mediate cell to cell communication in the skin between keratinocytes, fibroblasts and other cell types present in the skin.

10. The method of claim 8, wherein the composition is an oil-in-water emulsion.

25 11. The method of claim 8, wherein the at least two compounds is a combination of sunflower seed extract and hydrolyzed milk protein.

12. The method of claim 8, wherein the at least two compounds is a combination of sunflower seed extract and andrographolide and/or its derivatives.

13. The method of claim 8, wherein the at least two compounds is a combination of sunflower seed extract and adenosine 3',5'- monophosphate and/or its derivatives.

5

14. The method of claim 11, wherein the at least two compounds further comprises a third compound selected from the group consisting of plankton extract; andrographolide and its derivatives; and adenosine 3',5'- monophosphate and its derivatives; phytol and its derivatives; and mixtures thereof.

10

15. The method of claim 8, wherein said anti-aging and/or skin normalizing benefit is an improvement selected from the group consisting of the appearance of wrinkles, the appearance of fine lines, the appearance of skin blotchiness, smoothness, texture, moisture, elasticity, resiliency, color, clarity, tone, the size of pores, the number of pores, and combinations thereof.

15

16. The method of claim 15, wherein said improvement is selected from the group consisting of moisture, elasticity, resiliency, color, clarity, tone, the size of pores, the number of pores, and combinations thereof.

20

17. The method of claim 8, wherein said at least two compounds are about 0.1 wt% to about 20 wt% of the total weight of the composition.

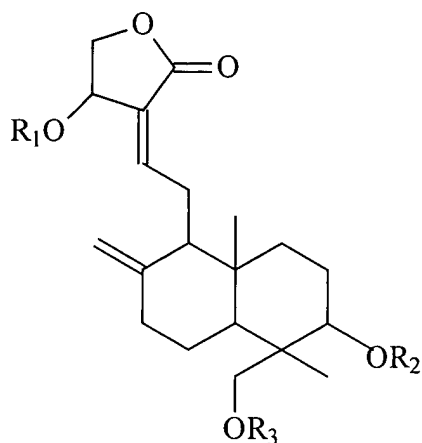
18. The method of claim 8, wherein at least one of said two compounds is phytol and/or its derivatives.

25

19. A topical composition comprising a cosmetically acceptable carrier at least two cell signaling compounds selected from the group consisting of:

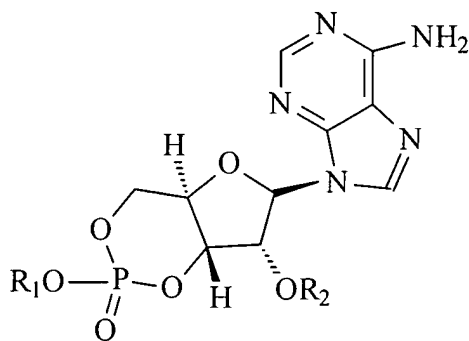
(a) andrographolide and its derivatives of the formula:

30



where R_1 , R_2 and R_3 can independently represent hydrogen, acyl, phenyl, mono- or
 5 polyphosphate, mono- or polysulfate, glycosyl, cyclic or acyclic alkyl, alkenyl or alkynyl,
 wherein said phosphate or sulfate derivatives may be in the form of free acids or as
 salts with counter-cations selected from the group consisting of lithium, sodium,
 potassium, ammonium, magnesium, strontium and barium;

10 (b) adenosine 3',5'- monophosphate and its derivatives of the formula:



where R_1 and R_2 can independently represent hydrogen, acyl, phenyl, mono- or
 polyphosphate, mono- or polysulfate, glycosyl, cyclic or acyclic alkyl, alkenyl or alkynyl,
 15 wherein said phosphate or sulfate derivatives may be in the form of free acids or as

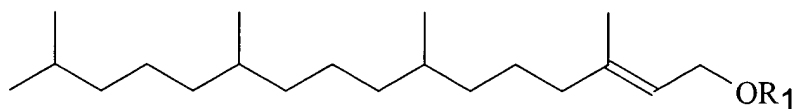
salts with counter-cations selected from the group consisting of lithium, sodium, potassium, ammonium, magnesium, strontium and barium;

(c) hydrolyzed milk protein;

(d) sunflower seed extract;

(e) plankton extract;

(f) phytol and its derivatives of the formula:



where R_1 can represent hydrogen, acyl, phenyl, mono- or polyphosphate, mono- or polysulfate, glycosyl, alkyl, alkenyl or alkynyl, wherein said phosphate or sulfate derivatives may be in the form of free acids or as salts with counter-cations selected from the group consisting of lithium, sodium, potassium, ammonium, magnesium, strontium and barium; and

(g) any mixture thereof,

wherein the at least two compounds is present in an amount effective to induce and/or promote the biosynthesis and/or bioactivity of endogenous chemicals that mediate cell to cell communication in the skin between keratinocytes, fibroblasts and other cell types present in the skin.

20. The composition of claim 19, wherein the composition, when topically applied to the skin, produces anti-aging and/or skin normalizing benefit.

21. The composition of claim 20, wherein said anti-aging and/or skin normalizing benefit is an improvement selected from the group consisting of the appearance of wrinkles, the appearance of fine lines, the appearance of skin blotchiness, smoothness, texture, moisture, elasticity, resiliency, color, clarity, tone, the size and number of pores, and combinations thereof.

22. The composition of claim 19, wherein said at least two compounds total about 0.1 wt% to about 20 wt% of the total weight of the composition.

23. The composition of claim 19, wherein the at least two compounds is a combination of sunflower seed extract and hydrolyzed milk protein.

24. The composition of claim 19, wherein the at least two compounds is a combination of sunflower seed extract and andrographolide and its derivatives.

25. The composition of claim 19, wherein the at least two compounds is a combination of sunflower seed extract and adenosine 3',5'- monophosphate and its derivatives.

26. The composition of claim 19, wherein one of said two compounds is phytol and/or its derivatives.

27. The composition of claim 23, wherein the at least two compounds further comprises a compound selected from the group consisting of plankton extract, andrographolide and its derivatives, and adenosine 3',5'- monophosphate and its derivatives.

28. The composition of claim 19, further comprising at least one or more ingredients selected from the group consisting of antioxidant, insect repellent, sunscreen, coloring agent, emulsifier, emollient, exfoliant, fragrance, humectant,

alcohol, fatty alcohol, insect repellent, skin healing agent, skin protecting agent, sunscreen, or any mixture thereof.